# **Mechanical Engineering**

Department Information

- Department Chair: Alan Kallmeyer, Ph.D.
- Graduate Coordinator: Yechun Wang, Ph.D.
- Department Location: 111 Dolve Hall
- Department Phone: (701) 231-8671
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- Department Web Site: www.ndsu.edu/me/ (http://www.ndsu.edu/me/)

## Application Deadline:

February 15 for fall semester; September 15 for spring semester. Applications received after the deadline will still be considered, but preference is given to those submitted by the deadline.

• Credential Offered: Ph.D., M.S.

• English Proficiency Requirements: TOEFL ibt 71; IELTS 6; Duolingo 100

# Fardad Azarmi, Ph.D.

University of Toronto, 2008

Research Interests: Thermal Spray Coatings, Thin Film, Multiscale Engineering Analysis, Finite Element Analysis, Failure in Materials, Corrosion, Materials Characterization, High Temperature Materials, Composite Structures, Metal Foams, Functionally Graded Materials

## Jordi Estevadeordal, Ph.D.

## University of Houston, 1996

Research Interests: Advanced Laser Techniques, Thermo-Fluid and Spray Diagnostics, 3D particle Image Velocimetry, Phosphorescence, Infrared Thermography, Filtered Rayleigh Scattering, Bio-Fluid Measurements

# Adam Gladen, Ph.D.

University of Minnesota, 2014

Research Interests: Renewable Energy, Solar Thermal Energy, Energy Storage - in particular Thermochemical Energy Storage, Thermodynamics, Solar Thermochemistry, Heat transfer, Radiative Transfer in Participating Media, Solar Reactor Design

## Alan R. Kallmeyer, Ph.D.

# University of Iowa, 1995

Research Interests: Theoretical, Computational, and Experimental Solid Mechanics, Fatigue and Fracture of Engineering Materials, Composite Materials

## Ghodrat Karami, Ph.D.

Imperial College of Science and Technology, University of London, 1984 Research Interests: Multiscale Computational Solid Mechanics, Biomechanics, Cellular Mechanics, Micromechanics Characterization of Composites, Continuum Mechanics, Structural Mechanics, Nonlinear and Large Deformation and Analysis, Thermoelastic Analysis

## Sumathy Krishnan, Ph.D.

Indian Institute of Technology, 1995 Research Interests: Solar Heating and Cooling, Concentrated Solar Power, Renewable Energy Integrated Systems

## Robert V. Pieri, Ph.D.

Carnegie-Mellon University, 1987 Research Interests: Design, Materials and Nanomaterials Characterization, Instructional Pedagogy, Fracture Mechanics, Measurements, Alternative Energy, and Industrial Support

Majura Selekwa, Ph.D. Florida A&M University, 2001 Research Interests: Robotics, Machine Intelligence, Soft computing Applications, Numerical Methods and Numerical Optimization, Optimal and Robust Control, Smart Actuation Control Systems, Real-Time Control in Mechatronics

### Yildirim Bora Suzen, Ph.D.

#### Wichita State University, 1998

Research Interests: Computational Fluid Dynamics, Aerodynamics, Modeling of Industrial Transport Processes, Transition and Turbulence Modeling, Active/Adaptive Flow Control, Turbo machinery, Multiprocessor CFD

### Annie X.W. Tangpong, Ph.D.

Carnegie Mellon University, 2006

Research Interests: Vibrations and Dynamics, Tribology, Friction Damping in Rotating Structures, Friction Damping in Nano- and Bio-materials

#### Chad A. Ulven, Ph.D.

University of Alabama at Birmingham, 2005 Research Interests: Advanced Composites Materials Development, Environmentally Friendly Materials Processing, Nondestructive Evaluation, Impact/ High Strain Rate Characterization of Advanced Materials

# Jessica L. Vold, Ph.D

North Dakota State University, 2012 Research Interests: Additive Manufacturing Materials, Polymer Matrix Composites, Torrefaction of Lignocellulosic Materials, Bio-Based Composite Materials, Mechanical Testing, Material Characterization

#### Xinnan Wang, Ph.D.

University of South Carolina, 2008 Research Interests: Experimental Biomechanics, Synthesis of Nanomaterials, Nanomechanical Characterization, Nanomanipulation

#### Yechun Wang, Ph.D.

University of Maryland, 2007 Research Interests: Microfluidics, Biofluid Mechanics, Computational Fluid Dynamics, Numerical Analysis, and Characterization of Organic Coatings

#### Xiangfa Wu, Ph.D.

University of Nebraska-Lincoln, 2003 Beijing Institute of Technology, 1998 Research Interests: Nanofabrication and Nanomaterials, Advanced Composites, Fracture and Impact Mechanics

#### Yan Zhang, Ph.D.

Iowa State University, 2013

Research Interests: Experimental Fluid Dynamics, Advanced Flow Diagnostic Techniques, Wind Engineering and Wind Hazard Mitigation, Bio-Fluid Mechanics and Cariovascular Hemodynamics Modeling